

COMMENT

Claims 1-5, 24, 27-28 and 32-33 remain in the case, claims 10-23, 25-26, 29-31, and 35 have been withdrawn.

Claims 6 and 28 have been amended to correct form and antecedent basis issues, respectively.

The Examiner has rejected claims 1, 5, 24, 27, 28, and 32-33 as not novel under 35 USC 102(b) citing Duam et al US 4,856,352. However, Duam does not teach or suggest the use of a heat pipe to maintain an isothermal condition of a conduit for obtaining a sample fluid from a fluid stream. No where is the term "heat pipe" mentioned, nor is such a device taught. Accordingly, one cannot argue that apparatus claims 1-9 and 28 or method claims 24 and 33 lack novelty said reference, as such claims specifically defines a system or method incorporating as an element a heat pipe.

The Examiner refers to element 32 in Duam as a "sampling probe/heat pipe" (page 3, line 4), but Duam refers to element 32 as a "probe sheath" (line 55, column 3) which "sheath" would appear to comprise a conduit, and would not appear not teach, suggest, or otherwise contemplate the use of a "heat pipe" as set forth and claimed in the present application.

As set forth on page 8 of the specification (and illustrated in the figures) of the present application, first paragraph, a heat pipe is not a simple conduit, but is a term of art relating to a heat exchange device:

"Heat pipes are well known having been developed at the Department of Energy's Los Alamos National Laboratory more than 40 years ago. It typically consists of a metal tube (Fig. 1a and 1b) having a small amount of working fluid 23. The working fluid's vapor 24 occupies all of the tube's inner volume not occupied by the fluid. A small amount of fluid vaporizes at the "hot end" of the tube and some of the vapor condenses at the "cold end" of the tube. The condensate returns to the tubes "hot end" through a capillary wick 4. There are many variations of heat pipe construction, which all employ the aforementioned principle of operation. By vaporization of the working fluid 23 and condensation of its vapor 24, the heat pipe strives to maintain an isothermal condition along its length."

Further, pages 9-11 of the specification set forth the operation of the heat pipe of the present system, which further distinguishes it from a simple conduit or "sheath". Accordingly, the term "heat pipe", which is a widely recognized term in engineering and thermodynamics, would not be applicable to a simple conduit, such as the probe sheath 32 of Duam.

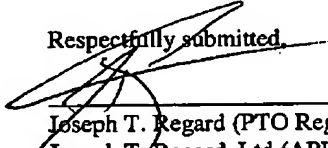
While Dauan does claim a "means for maintaining a temperature range" .. "outside of the gas duct" in its claims this would appear to relate to oven 48 (Column 4, lines 64-66) illustrated as a housing of some sort exterior the gas duct 30, and not at all to the system utilizing a heat pipe as taught and claimed in the present application.

Claim 27 of the present application, which does not specifically mention "heat pipe", has been amended such that the conduit has a portion situated exterior the fluid stream, and the isothermal regulation means "maintains said portion of said conduit exterior said fluid stream at an isothermal condition, utilizing said isothermal condition of said fluid stream", which claims as amended are not contemplated suggested, or otherwise anticipated by Duan. Claim 32, a method claim has been similarly amended.

It is now believed that the claims are in condition for allowance, and applicant thereby respectfully requests same.

If additional issues remain, and the Examiner is of the opinion that same could be resolved by telephone or examiner amendment, the undersigned respectfully requests same at (985) 845-0000.

Respectfully submitted,


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CERTIFICATE OF FAXING

I HEREBY CERTIFY that the present document was Transmitted to the Commissioner of Patents, central fax line number 703 872 9306 this 27th day of April, 2005.


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